The two CRYSTAL XL 42" scanner models differ in performance. The BASE model can easily be upgraded with new features for future requirements through the Smart-Card Upgrade Kit.

CRYSTAL XL 42" Wide Format Color Scanner Models		BASE	PLUS
Maximum Resolution:	(in dpi):	800	2400
Optical Resolution:	(in dpi):	508	508
Scan Accuracy:	0.1%+- 1pixel	√	√
Variable resolution setting:	from 50 dpi in one dpi increments	√	√
Scanning Speed inch/sec.:	(400dpi turbo, 24-bit RGB) (400dpi turbo, 8-bit index) (400dpi turbo, Graytone and B/W)	0.6"/s 3.0"/s 5.0"/s	0.6"/s 3.0"/s 10.0"/s
Media Maximum Width:	44" (1118 mm.)	√	√
Maximum Thickness:	0.6" (15 mm.)	√	√
Scan Width:	42" (1067 mm.) **Scan length:** not limited by scanner	√	√
Digital Image Processing embedded in hardware:	Dual 2D-Adaptive Enhancement Dual 2D-Adaptive Gray Dual 2D-Adaptive Gray ADL+ Error Diffusion Halftoning. 2D-Sharpening, 2D-Softening and 2D-Blur Filter Color Feature Extraction 2D-Adaptive Thresholding	√ √ √ √ √ √ √	√ √ √ √ √ √ √
Scan Modes:	24-bit color 8 bit Feature Extraction/Indexed color 8-bit Graytone Copy modes with Grayshades 1-bit black-and-white B/W Dual 2D-Adaptive Modes	√ √ √ √ √ √	√ √ √ √ √ √
Color Adjustment:	3x3 matrix multiplier Independent RGB tone curves (Gamma) Independent black-and-white point setting	√ √ √	√ √ √
Color Space:	NTSC sRGB	√ √	√ √
3C Auto-Maintenance System:	Auto-alignment to fraction of a pixel Auto-stitching to fraction of a pixel Basic Calibration Precision Color Calibration Auto monitoring and correction (stitching, black-and-white point)	√ √ √ √ √	√ √ √ √ √
Sensors:	Triple 4-linear CCDs (RGB triplets+ Panchromatic BW) 22.500 pixels 48 bits of color data capture. 16 bits of graytone data capture All digital cameras	√ √ √ √ √	√ √ √ √ √
One Touch Scanning:	Scan Copy Email	√ √ √	√ √ √
Advanced Power Management:	Temperature Control Low Power Mode Programmable power up timer	√ √ √	√ √ √
All-Wheel-Drive:	Contour Adjustment Broad Precision Rollers	√ √	√ √
Automatic Thickness Adjustment Control (ATAC):	Optimal grip of guide plate on variable thickness dimensions (up to 0.6") Built-in roller axel pressure sensors ATAC button on operators panel	√ √ √	√ √ √
Light Source:	Color matched fluorescent lamps Color Rendering Index (CRI)>95	√	√
User Replaceable Parts:	Glass plate, white background, lamp, filters	√	√
Optics:	Torsion stabilized for portability	√	√
Interface:	FireWire USB2 STI (Still Image Interface) and WIA (Windows Image Acquisition) support	√ √ √	√ √ √
Dimensions:	54.8" wide x 7.3" high x 18.3" deep (1392 x 185 x 465 mm.) **Weight:** 60 kg	√	√
Power:	110/220/240V, 60/50 cs, 180W	√	√
Interface Board (Included):	FireWire	√	√
WIDEsystem Kit (Included):	Drivers, NET server/client, Maintenance software, Maintenance Sheet	√	√
Copy Software (Optional):	JETimage^{NET}	√	√
Scan Software (Optional):	WIDEimage^{NET}	√	√
Floor Stand (Optional):	Includes document basket	√	√
Thick Media Support Table (Optional):	Floor stand required	√	√
Host Platforms:	Windows and Power Macintosh – See **www.contex.com** for supported OS with selected interface connection.	√	√

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contex.com
SCANNING TECHNOLOGY

CRYSTAL XL 42"

WIDE FORMAT COLOR SCANNERS

COPYING

- Advanced options for printing of grayshades
- Color matching to printer & media
- 3C Automatic Maintenance System
- Built-in Basic calibration – black-and-white points
- Built-in Precision Color calibration

SCANNING

- Fast monochrome scanner with added color capabilities
- Crisp, clear black-and-white
- 16 bit graytone capture for perfect reproduction of grayshades
- 48 bit color capture for photo-realistic vivid colors
- All-Wheel-Drive with contour adjustment
- Scans Thick Media – up to 0.6" (15mm)
- Automatic Thick Media Adjustment Control (ATAC) ATAC technology
- Replaceable parts to bring down service costs
- Flexible Plug 'n' Play connectivity - FireWire and USB2
- Scan to PDF format option
- Scan to network, also across the internet

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SCANNING TECHNOLOGY

CRYSTAL XL 42”

WIDE FORMAT COLOR SCANNERS

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SCANNING TECHNOLOGY

The Contex CRYSTAL XL 42” scanners are designed to give professionals the best in very high speed monochrome scanning with the additional option of quality color scanning for special jobs. The scanner’s 42” imaging area handles oversize E-size/A0 engineering drawings, architectural sketches, blueprints, sepias, detailed maps, drawings and large color posters.

High resolutions, easy maintenance, user replaceable parts and Automatic Thickness Adjustment Control (ATAC) are all combined in the CRYSTAL XL 42” making it the perfect device for effective and reliable high-production scanning.

With highly fast and effective monochrome scanning and the option to scan in perfect color, these devices offer a cost-effective solution for CAD, AEC and GIS professionals worldwide.

Scanning Superiority

This professional scanner meets all your wide-format scanning needs with high-quality grayscale, crisp, clear black-and-white and photorealistic colors. The CRYSTAL XL 42” sets new standards for wide-format scanning speeds, scanning a full E-size (A0) drawing at 400 dpi turbo in only 5 seconds. An image depends on its many graytones to bring out details and give it depth. On the CRYSTAL XL 42”, graytones are captured at 16 bits for maximum precision, passing the best 8 bits of graytone data to the computer. For color scanning, perfect color fidelity is ensured by capturing 48 bits of color data and passing the best 24 bits to the computer. The CRYSTAL XL 42” uses All-Digital cameras with advanced point-of-origin capture and on-board digital conversion ensuring minimum noise and an extended dynamic range. The scanner’s unique four-linear CCD technology, with a special panchromatic line, ensures that no colors are lost when scanning monochrome. Quality color matched fluorescent lamps ensure the market’s highest standards for color correctness.

Accuracy Lens Enhancement Technology (ALE)

With this scanner, GIS professionals, CAD and other specialized markets get a very high grade of precision stability in the scanned image. Contex has taken scanning precision to new levels by developing patented Accuracy Lens Enhancement (ALE) technology that electronically maintains 0.1% +- pixel precision across any two points of the scan line thus exceeding even the most rigid requirements in the industry today.

Care for your original

The scanner’s All-Wheel-Drive has been designed to ensure high standards for a perfectly straight scanning path with an optimal hold across the whole width of large documents. Contour adjustment and broad synchronized rollers ensure a perfectly straight scanning path without using unnecessary force so you avoid both image distortion and damage to your customer’s fragile originals.

Wide and Thick Originals with Automatic Thickness Adjustment Control (ATAC)

The CRYSTAL XL 42” can scan up to 0.6-inch (15mm) thick originals such as posters mounted on foamboards, gatorboards etc. With the ability to take wide originals – up to 44” (1118 mm) and a scan width of 42”, the CRYSTAL XL 42” brings new opportunities to your business. The CRYSTAL XL 42” supports Automatic Thickness Adjustment Control (ATAC), specially developed to make handling of large and bulky documents much easier. Inserting and scanning thick originals requires adjustment of the guide plate’s height so it accommodates the thick original with the correct pressure and grip. The CRYSTAL XL 42” makes this easy. You just insert your thick original for scanning and press down the ATAC button. Sensors in the scanner monitor the pressure on the original’s surface and position the guide plate at the optimal level. With ATAC technology, you are always ensured a perfect and even grip on any kind of original placed in the scanner.

One Touch Scanning

The CRYSTAL XL 42” operator’s panel is designed with convenient programmable action buttons for initiating common tasks directly from the scanner. Each button immediately activates a scan and opens the image in an appropriate application and format. The scanner comes with action buttons for scanning, copying and e-mailing loaded originals and can be reconfigured for other tasks.

Image Enhancement Power

The CRYSTAL XL 42” contains advanced technology for color and monochrome enhancement. The patented B/W adaptive thresholding works simultaneously on foreground, background, edges and other individual aspects of the original so you produce clean, crisp scans even from poor quality drawings. All processing is embedded in the hardware enabling you to perform powerful image enhancement without overhead and at speeds incomparable to standard software processing.

Copying Made Easy

Connect the CRYSTAL XL 42” scanner with a large-format printer and you get the perfect large format color and monochrome digital copier. With the scanner’s high precision of details and colors, users can enlarge their creations to full display sizes without losing quality. Use JETImage Copy Software with its Precision Color Management or other color RIP packages to achieve excellent color-matched output on large-format printers. Special monochrome copy modes, each fitted to specific original types are supported by the scanner’s digital processing.

Flexible Connectivity

The CRYSTAL XL 42” scanner lets you fit the connection to your immediate needs by offering two efficient Plug and Play (PnP) interface options - FireWire and the industry standard USB 2. Contex scanners protect your investment with support for STI (Still Image Interface) ensuring problem-free compatibility with current and future versions of Windows.

Precision Color

A new wide format scanner comes calibrated from the factory, but as time goes by, components and lamps will change character and affect color output. The unique Precision Color system lets you maintain perfect color results by harmonizing current scanning factors. You can calibrate in the field at any time, so you are always ensured stabile and predictable color output.

Automatic Scanner Maintenance

The CRYSTAL XL 42” scanner incorporates the Contex 3C Auto-Maintenance system that keeps your cameras perfectly aligned, adjusted and calibrated for optimal image quality. The process is automatic - just insert the maintenance sheet and click the wizard’s start button. The 3C Auto-Maintenance system aligns and stitches your cameras to a fraction of a pixel giving the highest wide format image precision available. Using patented Contex technology, camera stitching and black-white-points are constantly monitored and corrected while your scanner is running letting you concentrate on your work and take optimal scanner performance for granted.

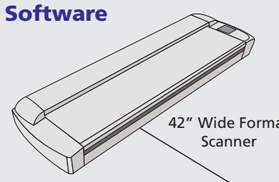
Fast and Easy Replacement of Vital Scanner parts

Now users can perform quick, easy and tool-free replacement of vital scanner parts. After long-term use, renewing parts such as the glass plate, lamp, filters and white background will refresh your scanner and ensure optimal scanning results. Your scanner system monitors the life-length of vital parts and will output a message when it’s time to consider a replacement. Part-replacement was once an expensive technician-only task but now you can save time and money on technical service and keep you’re business up and running without costly delays. The scanner’s open design lets you protect your investment by protecting your scanner from degradation.

Scan 2 Net Architecture

WIDE*image*^{NET} Scanning Software

- Prescan and preview
- File format conversion
- Scan-to-PDF with option for quality settings
- Tonal adjustment controls
- Rotation & alignment
- Precision measuring
- Viewing and zooming
- Batch scan
- Fast viewer
- Post-scanning imaging tools
- Feature extraction editor



JET*image*^{NET} Copy Software

- Large-format copying in 5 easy steps
- Standard presets for common tasks
- WYSIWYG previewing
- Real-time previewing of parameter adjustment
- Collate copy
- Touchscreen support
- CMY, CMYK, CMYKcm support
- Nesting, tiling & paneling
- Accounting
- Scan to file
- Scan-to-PDF with option for quality settings
- Print from file/file lists
- Copy on parallel printers

WIDE*system*^{NET} Software

- Scanner status monitoring
- Usage and maintenance times in log
- Scanner timer setup for automatic power-up/ power-down
- Scanner device information – firmware, hardware revisions
- Scan-to-net server setup
- Scan-to-net client setup
- Scan-to-net authorization setup